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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/042,595	01/09/2002	Stephane Eloy	2-13-8-3	6633

7590

10/18/2005

Docket Administrator (Room 3J-219)  
Lucent Technologies Inc.  
101 Crawfords Corner Road  
Holmdel, NJ 07733-3030

EXAMINER
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LIQU, JONATHAN

ART UNIT	PAPER NUMBER
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2663

DATE MAILED: 10/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/042,595

Applicant(s)

ELOY ET AL.

Examiner

Jonathan Liou

Art Unit

2663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 09 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-4, 9, 11-14, and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Haartsen (US Pat. No. 6,393,007.)
3. As per claims 1-3 and 11-13, Haartsen teaches of a method, apparatus, and a system of operating a telecommunications system comprising the steps of providing in a radio link (the radio link could be links 5 or 9. Fig. 1 and Fig. 5, Haartsen. The apparatus of Haartsen's structure teach to perform all of the method. Therefore, it must to have means in order to perform their invention. See Fig. 5 and col 5, lines 39-46.), a sequence of time frames (Fig. 3, Haartsen), each time frame including a plurality of time slots (Fig. 3 and Fig. 4, Haartsen), each time slot having an allocated channel (col 9, lines 27-41, Haartsen.), characterized in that the positions of said time slots and/or said allocated channels (Fig. 4, Haartsen.) are changed in subsequent/consecutive time frames of said sequence in a predetermined manner/sequence (Haartsen teaches the

Art Unit: 2663

time slots allocated to different position between subsequent frames, and follows predetermined sequence. See col 8, lines 54-67, Haartsen.)

4. As per claim 4 and 14, Haartsen also teaches the predetermined sequence is a cyclic rotation of the channel positions (See col 10, lines 53-58, Haartsen.)

5. As per claim 9 and 19, Haartsen also teaches plurality of time slots constitute all the time slots of the time frame (Haartsen teaches to allocate the channels to consecutive slots. Therefore, each/all time slot could have allocated channel. See col 9, lines 27-41, Haartsen.)

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 5 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haartsen (US Pat. No. 6,393,007.), in view of Krol et al. (US Pat. No. 3,908,087.)

8. As per claims 5 and 15, Haartsen teaches cyclic sequence rotation (See col 10, lines 53-58, Haartsen.) Haartsen does not teach the cyclic sequence rotates the time slots by one time slot within each succeeding time frame. However, Krol teaches in the consecutive frames, the transmission using time-division by transmitting one time slot of a cyclic sequence of time slots (See col 1, lines 5-19, Krol et al.) Thus, it would have been obvious for one who have ordinary skill in the art at the time the invention was made to use cyclic sequence rotations by one slot within each frame because Haartsen

Art Unit: 2663

teaches cyclic method for allocating channels (See col 10, lines 53-58, Haartsen.) and Krol et al. teaches the way of doing cyclic rotations (See col 1, lines 5-19, Krol et al.)

9. Claims 6 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haartsen (US Pat. No. 6,393,007.), in view of Kangas et al. (US Pat. No. 6,356,763)

10. As per claims 6 and 16, Haartsen teaches the method according to claim 3. Haartsen does not specifically teach a mobile station compute the sequence as a real time computation for each time frame. Kangas et al. teach mobile stations calculate frame structure timing in a real time (col 7, lines 37-49, Kangas et al.) Therefore, it would have been obvious for one who have ordinary skill in the art at the time the invention was made to use a real time computation for each time frame because Haartsen teaches the method for allocating channels to timeslots within the frame according to the algorithm sequence and Kangas et al. teaches using real time computation to allocate timeslots within the frame(col 7, lines 15-49, Kangas et al.)

11. Claims 7-8 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haartsen (US Pat. No. 6,393,007.), in view of Takahashi et al. (US Pat. No. 5,369,664.)

12. As per claims 7-8 and 17-18, Haartsen teaches the time slots should be changed in the subsequent frames in accordance with an algorithm (See col 7-8, lines 60-47, Haartsen.). Haartsen does not specifically teach a base station instructs a mobile station to transmit or receive in certain time slots. Takahashi et al. teach a base station could instruct a mobile station to transmit or receive in assigned time slots. (See col 4, lines 7-25.) In addition, according to claim 8, Haartsen teaches downlink direction

Art Unit: 2663

transmission; hence, the base station could transmit the predetermined method to the mobile station (See col 7-8, lines 60-47, Haartsen.) Therefore, it would have been obvious for one who have ordinary skill in the art for a base station instruction mobile station because Haartsen's method needs to have communication through the base station (radio access unit) to mobile or radio station in order to perform the sliding slots through subsequent frames. In addition, Haartsen teaches the downlink for base station to transmit the data to mobile and also teaches the method of changing time slots position through subsequent frames (See col 7-8, lines 60-47, Haartsen.)

13. Claims 10 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haartsen (US Pat. No. 6,393,007.), in view of Larsen (US Pat. No. 6,785,510.)

14. As per claims 10 and 20, Haartsen teaches the system could be operated in TDMA/TDD mode (See col 5, lines 52-62, Haartsen.) Haartsen does not specifically teach the system is UMTS mode, base station is a node B and each mobile station is a UE and channels are physical channels. However, Larsen teaches cellular radio network operate in UMTS mode, having the base station of node B and each user equipment (UE) could be used as the mobile station, and the channel could be physical channel (col 5, lines 40-60, and col 9, lines 10-12, Larsen.) Since Larsen teaches the system is a radio cellular system (See col 1, lines 8-154, Larsen.), it would have been obvious for one who have ordinary skill in the art at the time the invention was made to use UMTS mode, UE, Node B, and physical channel on Haartsen's system because Haartsen teaches the mobile radio system could be implement in most of radio communication applications (See col 12, lines 20-26, Larsen.)

**Conclusion**


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan Lieu whose telephone number is 571-272-8136. The examiner can normally be reached on 8:00AM - 5:00PM Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jonathan Liou

10/12/2005

  
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